UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 August 2008*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-14,17-24 and 26-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-11, 14, 18-24 and 26-34* is/are rejected.

7)☒ Claim(s) *12 and 13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All   b)☐ Some *   c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Status of claims

1.   Claims 1, 3-14, 17-24 and 26-34 are currently pending.

2.   Claims 2, 15, 16 and 25 are canceled.

3.   Claims 32-35 are newly added.

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.   Claims 19-21 and 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In particular, the rejected claims are directed toward a system and server device, however both of those systems do not recite hardware elements, thus the claims could be implemented in software per se, hence the claims are held non-statutory.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7.   The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting

directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior

to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8.   **Claims 1, 3, 7, 14, 17-24 and 26-34 are rejected under 35 U.S.C. 102(e) as**

being anticipated by Shultz et al (US Publication No. 2003/0061211), hereafter

referred to as Shultz.

        As to claims 1, 19, 20, 22 and 27, Shultz discloses a method comprising:

receiving a search query (Figure 2, element 202); determining a geographic location

associated with the query (paragraph [0012]); determining a topic associated with the

query (paragraph [0052], i.e. identifying subject matter (topic); determining a location

sensitivity score that corresponds to a geographical range associated with the topic

(paragraph [0053], wherein results are identified in association with location information

and business information (topic)); determining topical scores for a set of documents

based, at least in part, on the query ([paragraph [0060], wherein the results can be

sorted based on the distance between a user and destination); determining a distance

score for each document in the set of documents based, at least in part, on the location

sensitivity score and a distance between a geographic location associated with the

document and the geographic location associated with query (paragraph [0060], i.e.

"sorting criterion might include, a distance from a user identified location (e.g., step

232), corresponding advertising information (e.g., step 234) and/or business information

(e.g., step 236)"); and ordering the set of documents as a function of both the topical

scores of the set of documents and the distance scores of the set of documents

(paragraphs [0060] and [0061]).

As to claims 3 and 7, Shultz discloses the method wherein the function depends

on the topical score and the distance score of each document in the set of documents

(paragraph [0060]).

As to claims 14, 21 and 26, Shultz discloses the method wherein the ordering

the set of documents includes: generating an overall score for each of the documents in

the set of documents as a combination of the topical sore and the distance score, and

ordering the set of documents based, at least in part, on the overall scores (paragraph

[0060], i.e. "sorting criterion might include, a distance from a user identified location

(e.g., step 232), corresponding advertising information (e.g., step 234) and/or business

information (e.g., step 236)"); and ordering the set of documents as a function of both

the topical scores of the set of documents and the distance scores of the set of

documents (paragraphs [0060] and [0061]).

As to claims 17 and 18, Shultz discloses the method wherein the documents

are web pages or advertisements (paragraph [0020]).

As to claims 23, 24 and 30, Shultz discloses wherein the location sensitivity

data is determined based, at least in part, on a user profile associated with a user

(paragraph [0058], wherein user behavior with regard to prior search result is

represented by an action of a user, when he/she decides to change his/her listing

criteria (in the user's profile) after receiving search results).

As to claims 28 and 31, Shultz discloses the method for presenting

advertisements relevant to a target document (paragraph [0061]), comprising: analyzing

the target document to identify a topic for the target document and a location

associated with the target document (paragraph [0053] wherein business information

corresponds to a topic); identifying targeting information for a plurality of advertisements

(paragraph [0053], i.e. advertising information); comparing the targeting information to

the topic to identify a set of potential advertisements (paragraph [0053], i.e. the step of

identification); determining a distance score for at least one advertisement in the set of

potential advertisements using an advertiser location associated with the one

advertisement and the location associated with the target document (paragraph [0060],

i.e. determining distance); ordering the set of potential advertisements based, at least in

part, on the distance score of the at least one advertisement (paragraph [0060]); and

presenting at least some of the ordered set of potential advertisements (paragraph

[0061]).

As to claim 29, Shultz discloses the method further comprising: ranking the set

of potential advertisements based, at least in part, on the comparing; and wherein the

ordering the set of potential advertisements includes re-ranking at least some of the set

of potential advertisements (paragraphs [0060] and [0061], wherein a user can set

criteria for sorting results at least in part based on advertisement, and after new adds

are present, the sorting could be repeated, and order of the documents could be

changed based on the updated advertisements).

As to claim 33, Shultz discloses the system where when scoring the document,

the at least one server device is configured to score the document based (paragraph

[0060], establish ranking), at least in part, on the geographic location associated with

the document (paragraph [0052], wherein the distance from user's location to service

provider's address is established, thus either one or another location could be

interpreted as document's location because the specification does not supply clear

explanation on what this location is), the location sensitivity data (paragraph [0052],

wherein location sensitivity data includes business information and distance data), and

a measure of relevance of the document to the search query (paragraph [0060],

wherein returned documents are returned in response to submitted query and they

reflect measure of relevance, furthermore since only returned documents (i.e. search

results) are ranked, measure of those returned documents is considered).

As to claim 34, Shultz discloses the server where the means for identifying the

topic for the target document includes means for analyzing a content of the target

document to identify the topic for the target document (paragraph [0059], wherein

information such as good and services are considered a topic and are extracted from a

database associated with a retrieved document).

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   **Claims 4-6, 8, 9, 10 and 11 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Shultz in view of Berkan et al (US Publication No.

2003/0074353), hereafter referred to as Berkan.

       As to claims 4, 8, 9, 10, 11 and 32, Shultz teaches all the limitations disclosed

in claim 1, however he does not explicitly teaches the method wherein the topical score

is higher for a more relevant one of the documents than a less relevant one of the

documents, and the distance score is higher for one of the documents with the

geographic location nearer to the geographic location associated with the query than

another one of the documents with the geographic location further from the geographic

location associated with the query. Berkan teaches answer retrieval technique wherein

the results are ranked based on the score i.e. the most top result having the highest

scores (paragraphs 42 and 150). It would have been obvious to one of the ordinary skill

in the art during the time the invention was made to rank results in the descending

order, wherein the top position would have the highest score, as taught by Berkan,

because majority of match calculating algorithms lead to positive result, wherein each

matching criteria increases the overall matching score. Therefore, if the document

matches the query very well, the score would be also high. Once the score is

determined, the resulting documents can be put in order depending on their matching

scores, therefore it would create additional complexity to reverse the matching scores

so as to place the documents in the ascending order. Such an action based on the

additional calculations requirement would slow down the processing time.

     As to claims 5 and 6, Shultz teaches the method wherein determining distance

score for the document includes calculating a distance from the document location to

the location associated with the query (paragraph 81, lines 17-20). Shultz does not

explicitly teach however, that the function used for the calculation of the score is

monotonic. Berkan teaches the answer retrieval technique wherein score calculating

function shows the monotonic behavior (Figs 8A-8D). It would have been obvious to one

of the ordinary skill in the art during the time the invention was made to use a monotonic

function as taught by Berkan, in Shultz's sorting algorithm because this would simplify

calculations (constant polarity) and therefore minimize the processing time.

Allowable Subject Matter

11.   **Claims 12 and 13 are objected to as being dependent upon a rejected base**

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

     As to claim 12, the prior art does not teach the method as disclosed in claim 1,

wherein a first document in the set of document includes a corresponding first topical

score and first distance score, a second document in the set of documents includes a

corresponding second topical score higher than the first topical score and second

distance score lower than the first distance score, a third document in the set of

documents includes corresponding third topical score higher than the first topical score

and third distance score lower than the first distance score; and wherein the ordering

the set of documents includes ordering the second document higher than the first

document and the third document lower than the first document.

  As to claim 13, the prior art does not teach the method as disclosed in claim 1,

wherein a first document in the set of document includes a corresponding first topical

score and first distance score, a second document in the set of documents includes a

corresponding second topical score lower than the first topical score and second

distance score higher than the first distance score, a third document in the set of

documents includes corresponding third topical score lower than the first topical score

and third distance score higher than the first distance score; and wherein the ordering

the set of documents includes ordering the second document higher than the first

document and the third document lower than the first document.

Response to Arguments

12. Applicant's arguments filed August 28, 2008 have been fully considered but they

are not persuasive.

13. With respect to the arguments presented on page 13 stating that ""device" clearly

falls within the statutory class of machine", and that the amendment introduced to

claims 19-21, 27 and 31 make claims statutory, the Examiner agrees with this argument

partially. In particular, claim 27 appears to be statutory because hardware element (i.e.

server device) is a part of the system's structure, in other words it is recited in the body

of the claim. In contrast claims 19-21 and 31 recite "server device" in a preamble of the

claims, but then the body of the claim could be purely implemented as software thus as

far as the claim limitation go, the content of the claims 19-21 and 31 could be directed to

non-statutory subject matter. Thus claims 19-21 and 31 remain rejected under 35

U.S.C. 101 and rejection addressing claim 27 is withdrawn.

14.   *With respect to the Applicant's assertions on pages 14th, last paragraph, 15th last*

paragraph, 16th also last paragraph and 18th last paragraph, alleging that "Shultz et al.

does not disclose or suggest determining a location sensitivity score that corresponds to

a geographic range associated with a topic that is associated with a query, as recited in

claim 1. In fact, Shultz et al. does not disclose or suggest a geographic range

associated with a topic". On the bottom of page 15, the Applicant adds that "Shultz et al.

does not disclose or remotely suggest determining a geographic range associated with

the subject matter of the search, as would be required by claim 1 under this

interpretation of Shultz et al. Thus, Shultz et al. does not disclose or suggest

determining a location sensitivity score that corresponds to a geographical range

associated with a topic associated with a query".

15.   The Examiner disagrees with the statements recited above. First of all, the

Examiner would like to note that claim language regarding location sensitivity score is

very vague, thus it is very unclear how this score is obtained or what exactly it

encompasses. Furthermore, the Applicant is also silent with regards to the respective

scores, are they actually numerical scores stored separately and then combined

together in order to arrive with the final score that will set an optimal rank? It always can
be assumed what is possibly taking place resulting from claim language, however it
should be clear that the claim language shall be definite and there should be no
assumption as to what exactly takes place. Now looking at the Shultz reference, one
skilled in the art would recognize that according to paragraph [0053], the score of a
document can be determined based on the business information (i.e. topic, adds) as
well as distance to the provider. It is important to note that paragraph [0053] discloses
that all of the components of the rank could be used together, because Shultz uses
"and". Moreover, as to the geographical range, the Examiner considers the distance
from the user's location to a designated business address to constitute geographical
range. Thus it should be clear that location sensitivity score is a combination of
geographical range (i.e. distance) and other topical information associated with query
and returned results such as business information.

16.   *Bridging to page 17, the Applicant contends that "Shultz et al, cannot disclose or*
suggest determining a distance score for each document in the set of documents
based, at least in part, on the location sensitivity score and a distance between a
geographical location associated with the document and the geographic location
associated with the query".

17.   The Examiner disagrees. It should be first noted that "location sensitivity score"
according to the Applicant (page 16, last 3 lines) should correspond to a geographic
range associated with a topic (considered by the Examiner as distance between user's
location (query location) and business location (i.e. document location). Thus according

to this interpretation location sensitivity score is already related to geographical range. Furthermore distance score as previously noted by the Examiner in the most recent non-final rejection corresponds to a rank taught in paragraph [0060]. Consequently, the Examiner maintains that Shultz teaches all the limitations as currently claimed.

18.   *Similarly to the previous argument, the Applicant continues arguing on page 17, last paragraph that"Shultz et al. does not disclose or suggest determining a distance score for each document in the set of document based, at least in part, on the location sensitivity score and a distance between a geographical location associated with the document and geographic location associated with the query".*

19.   Again, the Examiner disagrees. According to paragraph [0060], for each retrieved result a rank score (i.e. distance score) is obtained, by looking at sorting criteria such as location sensitivity score (combination of business information and distance range) and distance (note that location sensitivity score already reflects the distance between a user and a business/document location).

20.   *Furthermore, on page 20, the Applicant asserts that "Shultz et al. does not disclose or suggest determining a distance score for at least one advertisement in a set of potential advertisement using a geographic location of an advertiser associated with the one advertisement and a geographic location associated with a target document".*

21.   The Examiner disagrees with the above statement. Firstly, in order to determine whether or not the prior art teaches the limitation disclosed above, it has to be first established what geographic location associated with a target document means. The Examiner attempted to gather more information about this location, however

unfortunately this feature is only discussed in paragraphs [0013] and [0054] of the published application, and there is no explicit explanation which would allow one skilled in the art to uniquely deduce what this phrase means or how it is obtained. Thus for the purposes of the examination, the Examiner interprets location associated with a target document as user's location since the target document is displayed on user's computer. Consequently the distance would be determined between advertiser's and user's geographical locations. If this interpretation is not in accord with interpretation that the Applicant intended, then the claim language should clearly disclose what particular limitations encompass. Furthermore, any amendments made to further clarify claimed subject matter should be consistent with the original specification to prevent introduction of new matter.

Conclusion

22.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

23.   A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Inquiry

24.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ANGELA M. LIE whose telephone number is (571)272-

8445. The examiner can normally be reached on M-F.

25.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

26.   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung T Vy/   /Angela M Lie/
Primary Examiner, Art Unit 2163   Examiner, Art Unit 2163